

Memorandum

To: Chairman William Keese, Presiding Member
Commissioner, Arthur H. Rosenfeld,
Associate Member

Date: December 5, 2003

Telephone: (916) 654-4208

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From: California Energy Commission - BILL PFANNER
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Sacramento, CA 95814-5512
Siting Project Manager

Bill Pfanner

Subject: **STATUS REPORT FOR THE BLYTHE II ENERGY PROJECT (02-AFC-1)**

This status report has been prepared in response to items 1 through 6 in the Committee Order dated October 30, 2003, and is provided to update the Committee on the progress of staff's review of the Blythe II Energy Project (BEP II).

1. **Any Topics Which Are Not Addressed Fully In The Preliminary Staff Assessment;**
2. **Any Outstanding Information Requests;**

The Preliminary Staff Assessment (PSA) was published on November 14, 2003. The PSA concluded that there is insufficient information for staff to determine if the project would conform with all applicable LORS, and whether the project's potential impacts on public health and safety, the environment, and transmission system would be adequately mitigated. Substantial additional information for Air Quality, Biology, Cultural Resources, Land Use, Socioeconomics, Traffic and Transportation, Transmission System Engineering (TSE), Worker Safety and Fire Protection, and Soil and Water Resources is necessary to finalize the analysis and make the necessary recommendations. The Executive Summary of the PSA is attached and identifies the specific information needs. The outstanding data needs are summarized as follows.

Air Quality

1. The Final Determination of Compliance (FDOC) for the Mojave Desert Air Quality Management District (MDAQMD).
2. A wind erosion control plan for the Water Conservation Offset Program (WCOP). The plan must be reviewed and approved by the Federal Natural Resources Conservation Service (NRCS).

Biological Resources

3. The Biological Assessment with full mitigation must be accepted as complete by the U.S. Fish and Wildlife Service (USFWS).
4. A mitigation and monitoring plan for burrowing owl must be proposed that is acceptable to California Department of Fish and Game (CDFG).

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Cultural Resources

5. Caithness and staff must complete consultation with Native Americans to identify and evaluate resources that could be impacted by the project, and address such information in the Final Staff Assessment (FSA).
6. The City of Blythe must determine through their planning process whether there would be ground disturbing activities required outside of the project site associated with road improvements.

Land Use

7. A full description of the WCOP including a parcel by parcel identification of farmland classifications, irrigation status, permanently retired parcels, and Williamson Act status.
8. Caithness must receive from the City a recommendation regarding a height variance and site plan application.
9. The Airport Land Use Commission (ALUC) has determined that the project is inconsistent with the County Land Use Plan (CLUP), while recommending conditions if the Energy Commission decides to approve the project. The applicant must obtain from the City of Blythe its analysis and recommendation regarding the ALUC's determination.

Socioeconomics

10. A complete description of the proposed fallowing of croplands associated with the WCOP is needed from Caithness. This should include details on the exact location of acreage being fallowed, such as township and range, number of acres, and type of crop to be fallowed.

Traffic and Transportation

11. Additional analysis is needed to assess the impact of BEP II on aviation traffic safety. This analysis will be based on studies of the potential impact of visual and thermal plumes on Blythe Airport operations. These studies will include assessment of the cumulative impact of BEP I and BEP II. Staff is conducting these studies but will require certain information from Blythe I and Blythe II.
12. Caithness may need to apply to the FAA for the evaluation of transmission towers that may be taller than the HRSG stacks.
13. Description of an alternative route for oversize and overweight loads that avoids use of Hobsonway is needed.
14. *(Intentionally left blank to match the number sequence in the Executive Summary of the PSA.)*

Transmission System Engineering

15. The System Impact Study (SIS) and/or Facility Study (FS) must be performed by SCE. According to staff's discussion with the representative of K. R. Salines & Associates, the Transient Stability study and Short Circuit study to be performed

by SCE must include analyses for the affected Western, SCE, IID and SDG&E systems.

16. The SIS and/or FS to be performed by Western must:

- include a Power Flow study under 2006 summer peak and 2006 spring conditions;
- address staff's concerns as stated in the Preliminary Staff Assessment about modeling of interconnection facilities and the new 500 kV bulk power line;
- include all downstream adverse impacts and selected mitigation measure(s) for each criteria violation.

17. The SIS and/or FS to be performed by IID must:

- include a Power Flow study under 2006 summer peak and 2006 spring conditions;
- address staff's concerns as stated in the Preliminary Staff Assessment about modeling of interconnection facilities and the new 500 kV bulk power line, and to include all downstream adverse impacts and selected mitigation measure(s) for each criteria violation.

18. For any reasonably foreseeable new or modified downstream facilities, environmental impact information and identification of mitigation measures are required.

19. Review, Analysis and Conclusions by the Cal-ISO on the SCE, Western and IID SISs and/or Facility studies.

20. Final layout plans with description of facilities and one line diagrams for the BEP II Switchyard, Buck Blvd. Substation, the new 500 kV line and Devers substation (Coachella or Dillon Road Substation included if necessary) with proposed equipment and their ratings in concurrence with the respective transmission owner.

21. A copy of the "request to interconnect BEP II" by Caithness to Western, and the associated study plan and schedules for completing the SIS and/or FS.

22. A copy of the "request to terminate the proposed new 500 kV line" by IID or others to SCE and Western, and the associated study plan and schedules for completing the SIS and/or FS.

23. Evidence that the CEQA/NEPA reviews have made adequate progress to ensure that construction of the 500 kV line and its schedule have been finalized by IID, that the 500 kV line has been approved for termination by SCE and Western, and that a schedule for building any other new or modified downstream facilities necessary to comply with reliability criteria have been finalized.

Soil and Water Resources

24. Discharge of wastewater from the BEP II facility to the proposed evaporation pond could result in potentially significant impacts to soil and groundwater quality as a result of leaks or overflows. Corrected evaporation pond calculations are needed and should also be submitted to the Regional Water Quality Control Board (RWQCB).

25. Draft waste discharge requirements (WDRs) for the evaporation ponds are needed at least 60 days prior to the release of the FSA.
26. Caithness needs to quantify the amount of auxiliary firing and reflect the associated water use in revised heat and water balances.
27. Various submittals have been in conflict regarding the type of inlet cooling. Therefore, the heat and water balances should be revised to reflect the type of inlet cooling that will be used at the plant.
28. Construction and operations at the BEP II site could result in increased stormwater runoff volumes and peak flowrates leaving the BEP II site resulting in potentially significant impacts. Revised design calculations for the stormwater retention basin are needed that demonstrate that the proposed retention basin can contain the runoff produced by a 100-year event and would meet the City of Blythe's freeboard requirements.
29. A revised retention basin design that includes an emergency spillway or outlet structure to safely route potential overflows away from the containment berm are needed.
30. Because the BEP II project as proposed by Caithness would cause significant impacts to the water supply and its users, would not conform to applicable LORS and State policy, and there is a feasible alternative to the use of Colorado River groundwater; staff recommends the project be amended to use the Dry Cooling alternative developed in the Water Supply and Cooling Options Study (Appendix A), or equivalent. The Applicant should submit an amended AFC including a description of project design and operational plan for the BEP II.
31. Staff needs the full report on the 2002 groundwater quality sampling of BEP I production wells including the results that did not exceed the primary or secondary drinking water standards. The Blythe Lemon Ranch gasoline leak may require further evaluation for potential significant impacts related to entrainment and migration of any contaminate plume.
32. Reasonably quantitative conservation of water by the WCOP cannot be determined because there is no comprehensive plan available. Wind and water borne soil erosion-related potentially significant impacts to fallowed lands could occur due to inadequate mitigation measures not consistent with NRCS recommended guidelines. A complete WCOP is needed that includes detailed procedures for implementation, management, monitoring, reporting, and verification of its effectiveness for both quantitative conservation of 3300 AFY of Colorado River groundwater and mitigation of erosion-related potentially significant impacts to fallowed lands. The complete draft WCOP should be made available for review and comment by agencies to include the USBR, CRB, PVID, and NRCS at least 60 days prior to the date scheduled for publication of the FSA.

33. Responses to unanswered Staff Data Requests. (Note: Staff has clarified that the applicant's responses to items 24 through 32 will substantially address all unanswered Data Requests). The following identifies the specific Data Requests associated with items 24 through 32:

24 - Requested in Data Requests 59, 60, 150, 207-210.
25 – No Data Request issued.
26 - Requested in Data Requests 58, 145, 200, 201.
27 - Requested in Data Request 144, 202-206.
28 - Requested in Data Requests 66, 70, 164, 211-213.
29 - Requested in Data Requests 151, 212.
30 - No Data Request issued.
31 - Requested in Data Requests 65, 217.
32 - Requested in Data Requests 53, 55, 73, 75, 76, 80, 142,
171, 174, 198, 224-226.

Worker Safety and Fire Protection

34. Prior to the issuance of the FSA, the applicant and the City of Blythe Fire Department must provide staff with adequate relevant and specific information for staff to conduct a thorough analysis and make a determination regarding impacts to local services.

Environmental Justice

35. In order for staff to complete the environmental justice analysis, the applicant will need to provide full details on the proposed fallowing of croplands associated with the WCOP including the exact location of acreage being fallowed (such as township and range) the number of acres and type of crop to be fallowed, and number of workers associated with the crop and acreage.

3. The Critical Path Topic Or Issue For Purposes Of Completing The Final Staff Assessment;

Without a complete description of the project's transmission system, cooling system, and/or Water Conservation Offset Program, the completeness of the FSA will be delayed until these issues are resolved.

Staff must have a complete description of the proposed project's transmission interconnection configuration and new transmission facilities in order to accurately analyze the project's potential for impacts and its compliance with applicable laws, ordinances, regulations and standards (LORS). Since filing the AFC, the applicant has made numerous changes to the project's proposed interconnection with the electricity grid and the transmission facilities necessary to deliver the project's power to the load. Shortly before publication of the PSA, the applicant conveyed to staff that it was committed to a particular interconnection design scenario to the Western Area Power

Administration (Western) system. Staff later learned, however, that applicant had applied for transmission interconnection under several different design configurations with Cal-ISO and Southern California Edison (SCE).

Staff has made every effort to pin down the project's proposed interconnection configuration. On several occasions staff has requested information concerning how the proposed project will interconnect with the transmission grid to distribute its electricity. In data request #232, issued on May 7, 2003, staff asked applicant to provide a "copy of the Application for Interconnection of BEPII to the Western System". Applicant responded in writing that it would submit the application as a confidential filing. Staff has yet to receive such a submittal, and the Commission's Docket Log contains no evidence that the information was ever submitted.

There are many unanswered questions regarding the proposed Desert Southwest Transmission Project, through which BEP II's electricity would ultimately travel. SCE has raised serious reliability concerns due to the line's close proximity to SEC's alignment for Devers-Palo Verde 1 & 2 (Letter from IID to Mr. Kalish, August 18, 2003.), and the CPUC has stated that it could take as long as two years or more to approve the proposed line. (E-mail from Donna Jordan to Al McCuen, August 25, 2003.) Critical information must be made available to staff in order to resolve these questions and ensure the timeline for approvals is consistent with CPUC certification of the Desert Southwest Transmission Project prior to issuance of the FSA.

Once the requested System Impact and Facilities Studies are completed and Caithness selects measures to mitigate system impacts that are acceptable to SCE, Imperial Irrigation District (IID), Western, and the Cal-ISO, Caithness should submit an AFC amendment describing these project changes and provide the necessary detailed analysis for all the relevant technical disciplines impacted by these changes. The selected interconnection and termination configuration should be the one for which Caithness is seeking a permit from the Energy Commission, and it must be consistent with all other filings Caithness makes with SCE, IID, Western, the Cal-ISO, or other transmission providers.

Staff also concludes that Caithness' proposed use of groundwater to cool the plant would cause a significant direct impact to the Palo Verde Irrigation District water supply and its users, and contribute to a significant cumulative impact to the State's Colorado River water supply and its users. In light of these significant impacts and the requirement that the state reduce its use of Colorado River water over the coming years, staff recommends the project be cooled without the use of groundwater through dry cooling technology that has been successfully employed by other desert facilities. Staff recommends that the applicant provide an amendment to the AFC changing the project to dry cooling. The analysis of this project change would be included in the FSA.

If the applicant elects to pursue approval of a project with a wet cooling system, a complete description of the proposed fallowing of croplands associated with the WCOP is needed. This should include details on the exact location of acreage being fallowed, the number of acres and type of crop to be fallowed, the average number of workers per acre, and a parcel by parcel identification of farmland classifications, irrigation status, permanently retired parcels, and Williamson Act status. It is also recommended that a

wind erosion control plan be approved by the Federal Natural Resources Conservation Service (NRCS).

4. Any Federal Actions Or Permits Required For This Project And Their Status;

As identified in the response to items 1 and 2 above, there are several critical federal, state and local actions that are outstanding. This includes:

- the FDOC for the Mojave Desert Air Quality Management District (MDAQMD);
- a Biological Assessment with full mitigation, accepted as complete by the U.S. Fish and Wildlife Service (USFWS);
- a schedule for completion of the Biological Opinion;
- a mitigation and monitoring plan for burrowing owl acceptable to California Department of Fish and Game (CDFG);
- draft waste discharge requirements (WDRs) for the evaporation ponds are needed at least 60 days prior to the release of the FSA; and
- the complete draft WCOP should be made available for review and comment by agencies to include the United States Bureau of Reclamation (USBR), Colorado River Board (CRB), Palo Verde Irrigation District (PVID), and Natural Resource Conservation Service (NRCS) at least 60 days prior to the date scheduled for publication of the FSA.

5. The Need For A Status Conference;

In the June 27, 2003 status report, staff identified the information needed from the applicant in order to complete the PSA. Staff specifically requested a copy of the applicant's interconnection study and termination request to Western, the study plan and schedules for the interconnection with the Western system at Buck Blvd. Substation, and the study plan by the Imperial Irrigation District (IID) and Southern California Edison (SCE), including schedules for their studies and facilities construction. No such information has been provided to date and no objection was made to the request for this information.

In the July 31, 2003 status report, staff noted that it had still not received the requested transmission information and again identified the information as outstanding, including applicant's interconnection study request, interconnection studies for Western, IID, and SCE, and final transmission studies.

Considering the number of issues and the outstanding information needs, staff believes that a Status Conference would be beneficial. This will allow the applicant to identify when the outstanding information will be provided and the Committee to determine the next set of milestones in the project schedule.

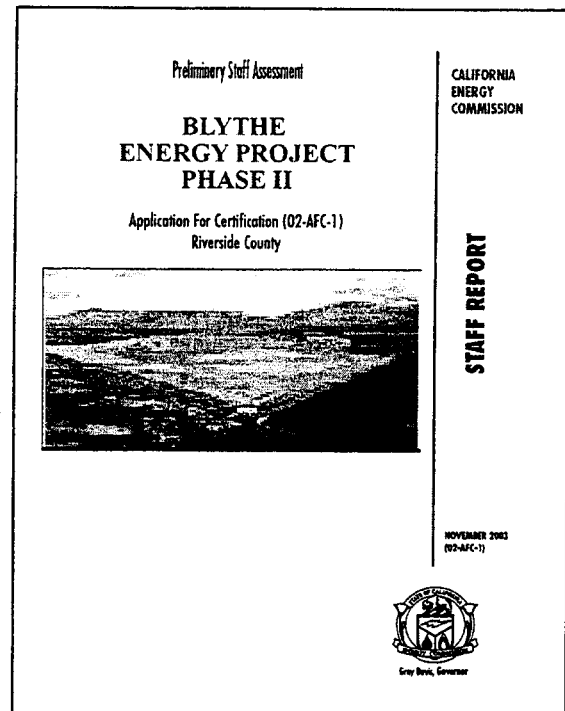
6. A Proposed Schedule For The Remainder Of The Proceeding.

The BEP II PSA has been circulated for review and comment, and staff is accepting written comments from individuals and local, state and federal agencies. We propose postponing the PSA workshop(s) until after the above noted information has been received. Staff would also plan to complete the FSA 60 days after receipt of all outstanding information, provided it is complete and additional data requests are not necessary. If critical information cannot be provided in a timely manner, staff recommends that the Committee consider the merits of suspending the schedule until such time that all information can be secured.

Staff requests the Committee's assistance in establishing a schedule for obtaining the necessary information from the applicant. To resolve the outstanding issues, staff requests that the Committee schedule a Status Conference as soon as practical.

Attachment: Executive Summary from the PSA

cc: Docket (02-AFC-1)
Proof of Service List



CALIFORNIA ENERGY COMMISSION

SITING OFFICE

William Pfanner
Project Manager

Roger E. Johnson
Office Manager

SYSTEMS ASSESSMENT & FACILITIES SITING DIVISION

Terrence O'Brien
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EXECUTIVE SUMMARY

William Pfanner - Project Manager

The Preliminary Staff Assessment (PSA) contains the California Energy Commission (Energy Commission) staff's independent evaluation of the Blythe Energy Project Phase II (BEP II) Application for Certification (AFC) (02-AFC-1). This PSA examines engineering, environmental and public health and safety aspects of BEP II, based on the information provided by the applicant (Caithness Blythe II, LLC) and other sources available at the time the PSA was prepared. With the exception of nine technical areas, it also includes conclusions, recommendations and proposed conditions of certification that would apply to the design, construction, operation, and closure of the proposed facility if it is certified. The PSA contains analyses similar to those contained in Environmental Impact Reports required by the California Environmental Quality Act (CEQA).

The PSA is not a Committee document nor is it a final staff recommendation or proposed decision on the proposal. After considering public and agency comments and the additional information identified in this document is received, a Final Staff Assessment (FSA) will be completed.

BACKGROUND

The BEP II AFC was filed with the California Energy Commission on February 19, 2002. The project AFC was amended in May to relocate the BEP II structures to the adjacent parcel and again in July of 2002 to reconfigure the evaporation ponds. On July 17, 2002, the Energy Commission found the AFC to be data adequate for the 12-month review process. The project is located adjacent to the Blythe Energy Project I (BEP I) that was approved by the Energy Commission on March 21, 2001. The applicant has identified the Western Area Power Administration (Western) as an interconnecting utility; however, a system impact/facility study of the project's transmission interconnection configuration(s) is still needed for staff to complete its evaluation.

In the past, where there has been an interconnection with Western, the Energy Commission and Western have completed a joint National Environmental Policy Act (NEPA) and CEQA study of the project. In this case, however, Caithness Blythe II has not funded Western's participation in the environmental review process and the necessary transmission interconnection studies. Therefore, the Energy Commission staff prepared this PSA as a CEQA equivalent document, independent of Western. If the project interconnects with Western at the Buck Blvd. substation, a NEPA process will be required.

The review of the BEP II AFC was delayed due to many unresolved issues, including transmission line configuration issues and the lack of completed interconnection studies by the interconnecting utilities (Western, Southern California Edison (SCE), and Imperial Irrigation District (IID)). There were also disagreements between staff and the applicant on the potential for impacts to the Colorado River groundwater and water conservation measures. Staff issued three rounds of data requests to the applicant, resulting in three volumes of data response comments. It should be noted that some of the data

response comments have resulted in changes in the project description not reflected in the AFC or AFC amendments.

For example, the AFC provides a project description that does not accurately define how the power generated at the Blythe II project will be interconnected to downstream systems. In March 2003, the applicant issued Data Response 179a, citing the Blythe Area Regional Transmission Flow Analysis (BART Study) as a definition of how BEP II will interconnect with downstream systems. The BART Study analyzed the Blythe area's regional transmission system including the feasibility of selected transmission options to support the reliable interconnection of the 520 MW BEP II project. The study shows 8+ scenarios of transmission lines extending offsite from the Blythe II project. In a conference call on April 10, 2003, the applicant proposed an interconnection plan that would tie Blythe II to the Buck Boulevard Substation and a proposed IID 118-mile 230 kV or 500kV transmission line connection to the Devers Substation. Therefore, although it is not specifically contained in the AFC, this one BART Study alternative is the BEP II project description interconnection configuration Caithness is seeking a license for and is the project description staff assessed in this PSA.

The analyses contained in this PSA are based upon information from: 1) the AFC; 2) subsequent amendments; 3) responses to data requests, workshops and site visits; 4) supplementary information from federal, state and local agencies; 5) staff research; and 6) existing documents and publications.

PROJECT DESCRIPTION

BEP II is a nominally rated 520 MW combined-cycle power plant consisting of two Siemens Westinghouse V84.3a 170 MW combustion turbine generators (CTGs), one (1) 180 MW steam turbine generator, and supporting equipment. BEP II is adjacent to and located entirely within the approved BEP I site boundary on the Expansion Site approved by the Energy Commission as an amendment to BEP I (See BEP I Petition for Amendment I-B, dated November 23, 2001). BEP II may utilize some existing facilities at the BEP I site including the Control/Administration and Maintenance Buildings. Other BEP I facilities that are proposed to be expanded to serve BEP II include the groundwater supply, water treatment systems, fire protection facilities and site access roads. Natural gas will be supplied to the BEP II plant by the natural gas pipeline constructed as part of the approved and operating BEP I project.

BEP II will be electrically interconnected to the Buck Blvd. Substation, located at the northeastern corner of the BEP I site. Western constructed the Buck Blvd. Substation as part of BEP I, and currently owns and operates the facility. Some of the additional facilities required in the Buck Blvd. Substation for BEP II have already been evaluated and approved as part of the Western BEP I Facility Study. However, to facilitate the 500kV single circuit line from the new BEP II 500 kV Integration switchyard, the Buck Blvd. Substation would be expanded to include three new 500 kV switch bays and a new step-down transformer. A new 2,500 foot long 500 kV single circuit transmission line would connect the BEP II 500 kV Integration switchyard to one of the proposed 500 kV switch bays in the Buck Blvd. Substation. The Buck Blvd. Substation will also be connected to a proposed IID 118-mile single circuit new 500 kV transmission line

connecting to the SCE Devers Substation north of Palm Springs, California. This IID 500 kV line is not part of the BEP II AFC and is not under the permitting jurisdiction of the Energy Commission although its need is engendered by BEP II.

Water to operate the BEP II facility is proposed to be supplied by one additional groundwater well having the capability to pump up to 3,000 gallons per minute (gpm). Supply and wastewater treatment systems being constructed as part of the approved BEP I are proposed to be duplicated. A third evaporation pond is proposed to be added for BEP II.

A more complete description of the project that includes the proposed site layout and regional maps is contained in the **PROJECT DESCRIPTION** section of this PSA.

STAFF'S ASSESSMENT

Each technical area section of the PSA contains a discussion of impacts, and where appropriate, mitigation measures and conditions of certification. The PSA includes staff's assessment of:

- the environmental setting of the proposal;
- impacts on public health and safety, and measures proposed to mitigate these impacts;
- environmental impacts, and measures proposed to mitigate these impacts; the engineering design of the proposed facility, and engineering measures proposed to ensure the project can be constructed and operated safely and reliably;
- project closure;
- project alternatives;
- compliance of the project with all applicable laws, ordinances, regulations and standards (LORS) during construction and operation;
- environmental justice for minority and low income populations; and
- proposed conditions of certification.

Staff has prepared its preliminary analyses and has made preliminary recommendations for most technical areas, while in some technical areas, staff was unable to make recommendations due to incomplete information, or incomplete project events related to processes required by the Cal-ISO, federal, state and local agencies. The status of each technical area is summarized below.

SUMMARY OF PROJECT RELATED IMPACTS

Staff believes that as BEP II is currently proposed, the project will not comply with all applicable laws, ordinances, regulations, and standards (LORS), and that significant adverse direct, indirect, and cumulative impacts will occur. Noteworthy issues remain in some of the technical areas noted below. For a more detailed review of potential

impacts, see staff's technical analyses. The following identifies the items necessary for completion of the FSA and provides a discussion of associated issues.

Technical Area	Complies with LORS	Impacts Mitigated
Air Quality	No	Incomplete
Biological Resources	Incomplete	Incomplete
Cultural Resources	Yes	Incomplete
Efficiency	Yes	Yes
Facility Design	Yes	Yes
Geology & Paleontology	Yes	Yes
Hazardous Materials	Yes	Yes
Land Use	Incomplete	Incomplete
Noise	Yes	Yes
Public Health	Yes	Yes
Reliability	Yes	Yes
Socioeconomic Resources	Yes	Incomplete
Soil & Water Resources	No	Incomplete
Traffic & Transportation	Incomplete	No
Transmission Line Safety/Nuisance	Yes	Yes
Transmission System Engineering	No	No
Visual Resources	Yes	Yes
Waste Management	Yes	Yes
Worker Safety and Fire Protection	Yes	Incomplete

AIR QUALITY

Outstanding Data

1. The Final Determination of Compliance (FDOC) for the Mojave Desert Air Quality Management District (MDAQMD).
2. A wind erosion control plan for the Water Conservation Offset Program (WCOP) must be submitted prior to completion of the FSA. The plan must be reviewed and approved by the Federal Natural Resources Conservation Service (NRCS).

Discussion

The U.S. Environmental Protection Agency (EPA) and California Air Resources Board (CARB) requested that many changes be included in the MDAQMD's FDOC, and it is not yet clear whether MDAQMD will implement all of the requests made by these oversight agencies. It is not clear whether BEP II would be likely to comply with requirements for Best Available Control Technologies (BACT) because the determination made by MDAQMD is inconsistent with U.S. EPA and CARB recommendations. The FDOC should include revised BACT limits, revised limits during startup and shutdown periods, and new conditions addressing the inlet air chillers that were added by the applicant in July 2003.

The U.S. EPA believes that the offset strategy for PM10 is invalid and that special case-by-case approval of the offset interpollutant trading scheme is required. If these concerns are not addressed before the MDAQMD issues the FDOC, additional mitigation may be necessary to address project-related impacts to PM10 and ozone from precursor emissions. Because the offset strategy is incomplete, staff cannot determine whether BEP II would be likely to comply with MDAQMD offset rules or whether impacts to PM10 and ozone would be mitigated to a level of insignificance.

The WCOP that the applicant proposes would result in rotational fallowing of agricultural land in the area. Agricultural operations in the existing conditions cause emissions of fugitive dust, which contributes to elevated PM10 concentrations. It is not presently clear whether the WCOP will eventually be reviewed and approved by the Federal Natural Resources Conservation Service (NRCS) to ensure that proper conservation practices are utilized on the fallowed lands. Staff expects that wind erosion and fugitive dust emissions from the fallow lands would be minimized if the recommendations of this agency are included in the WCOP.

BIOLOGICAL RESOURCES

Outstanding Data

3. The Biological Assessment with full mitigation must be accepted as complete by the U.S. Fish and Wildlife Service (USFWS).
4. A mitigation and monitoring plan for burrowing owl must be proposed that is acceptable to California Department of Fish and Game (CDFG).

Discussion

To obtain a USFWS determination, the federal lead for the project, Western, has submitted the Biological Assessment, and asked for concurrence with their determination of no effect to desert tortoise. The USFWS has requested additional information before they can make a concurrence.

The applicant must make a choice of assuming presence of burrowing owls and undergoing 2081(b) consultation, performing winter and spring surveys during this proceeding, or accepting a condition of certification that may delay construction until the proper breeding and winter surveys can be completed to show absence of burrowing owls.

CULTURAL RESOURCES

Outstanding Data

5. Caithness and staff must complete consultation with Native Americans to identify and evaluate resources that could be impacted by the project, and address such information in the FSA.

6. The City of Blythe must determine through their planning process whether there would be ground disturbing activities required outside of the project site.

Discussion

Consultation with Native Americans to identify and evaluate resources is not yet complete. Staff is continuing contacting Native American groups and individuals to identify resources that could be impacted by the project. If there is a resource that qualifies as a Native American sacred site that would be impacted by the project, then mitigation measures would be developed to reduce the impacts to less than significant, if possible.

The City of Blythe has not determined through their planning process whether there would be ground disturbing activities, such as the widening of access roads, required outside of the project site. This could impact portions of CA-RIV-6370H or deposits that have not yet been identified through the survey process. Decisions by the City and information about resources that could be impacted will be provided in the Final Staff Assessment.

LAND USE

Outstanding Data

7. A full description of the WCOP including a parcel by parcel identification of farmland classifications, irrigation status, permanently retired parcels, and Williamson Act status.

Discussion

Any permanent retirement of productive farmland by the WCOP must be mitigated to avoid impacts to agricultural lands and conflicts with Williamson Act contracts. The applicant must obtain the Riverside County Agriculture Commissioner's and County Planning Department's review of WCOP-proposed parcels for any Williamson Act contract conflicts.

Outstanding Data

8. Caithness must receive from the City a recommendation regarding a height variance and site plan application.

Discussion

The project is consistent with the City's General Plan and generally consistent with the City's zoning. However, the project would exceed the City's 34-foot height restriction in the Heavy Industrial Zone. The Energy Commission must receive from the City a recommendation for a variance to allow a structure height in excess of the height limit. The applicant has not yet requested the City to provide a recommendation for site plan approval and a height variance. If the City recommends approval of the variance, the nonconformance with City LORS would be resolved.

Outstanding Data

9. The Airport Land Use Commission (ALUC) has determined that the project is inconsistent with the County Land Use Plan (CLUP), while recommending conditions if the Energy Commission decides to approve the project. The City has not yet submitted its analysis and recommendation regarding the ALUC's determination. This will be required for the completion of the FSA.

Discussion

Because the City Council for the City of Blythe could overrule the ALUC, staff needs to receive the City's analysis and recommendation in order to decide whether to recommend that the CEC accept the ALUC's determination of inconsistency. The potential for land use compatibility impacts, including cumulative impact, of visual water vapor plumes and thermal plumes caused by the project are being studied by staff and will be addressed in the FSA.

SOCIOECONOMICS

Outstanding Data

10. A complete description of the proposed fallowing of croplands associated with the WCOP is needed from Caithness. This should include details on the exact location of acreage being fallowed, such as township and range and number of acres and type of crop to be fallowed.

Discussion

Implementation of the WCOP would result in changes to the agricultural use of some lands in the vicinity of the proposed project. However, the applicant has provided no information as to which currently cultivated lands might be fallowed. Therefore, staff cannot determine whether a significant impact to the farm labor, farm services, and farm supply sector will occur or whether it would disproportionately impact the minority and low-income population of Mesa Verde.

TRAFFIC AND TRANSPORTATION

Outstanding Data

11. Additional analysis is needed to assess the impact of BEP II on aviation traffic safety. This analysis will be based on studies of the potential impact of visual and thermal plumes on Blythe Airport operations. These studies will include assessment of the cumulative impact of BEP I and BEP II. Staff is conducting these studies but will require certain information from Blythe I and Blythe II.

Discussion

Staff cannot reach a conclusion regarding the consistency of the project with the CLUP, and cannot complete the Traffic and Transportation section of the PSA until there is sufficient information to allow a thorough analysis of the impact of BEP II on airport

traffic safety. Staff is facilitating additional studies and is coordinating with state, local, and federal agencies.

Outstanding Data

12. Caithness may need to apply to the FAA for the evaluation of transmission towers that may be taller than the HRSG stacks.

Discussion

Caithness needs to identify the transmission towers that will be used near the airport. The transmission towers may be taller than the HRSG stacks, requiring a reevaluation by FAA of its determination of no hazard to air navigation.

Outstanding Data

13. Description of an alternative route for oversize and overweight loads that avoids use of Hobsonway is needed.

Discussion

The City's recent renovation of Hobsonway does not allow for oversize and overweight loads to be transported on Hobsonway from the railroad offloading point near Commercial Street.

TRANSMISSION SYSTEM ENGINEERING

Outstanding Data

15. The System Impact Study (SIS) and/or Facility Study (FS) to be performed by **SCE** must include:

- a Power Flow study under 2006 summer peak and 2006 spring conditions;
- a Transient Stability study;
- a Short Circuit study; and
- must address staff's concerns as stated in the Preliminary Staff Assessment about modeling of interconnection facilities and the new 500 kV bulk power line, and must include all downstream adverse impacts and selected mitigation measure(s) for each criteria violation.

According to staff's discussion with the representative of K. R. Salines & Associates, the Transient Stability study and Short Circuit study to be performed by SCE must include analyses for the affected Western, SCE, IID and SDG&E systems.

16. The SIS and/or FS to be performed by **Western** must:

- include a Power Flow study under 2006 summer peak and 2006 spring conditions;

- address staff's concerns as stated in the Preliminary Staff Assessment about modeling of interconnection facilities and the new 500 kV bulk power line;
- include all downstream adverse impacts and selected mitigation measure(s) for each criteria violation.

If SCE does not perform a Transient Stability study and a Short Circuit study for the affected Western system, the SIS and/or FS to be performed by Western must include such analyses for the affected Western system.

17. The SIS and/or FS to be performed by **IID** must :

- include a Power Flow study under 2006 summer peak and 2006 spring conditions;
- address staff's concerns as stated in the preliminary Staff Assessment about modeling of interconnection facilities and the new 500 kV bulk power line, and to include all downstream adverse impacts and selected mitigation measure(s) for each criteria violation.

If SCE does not perform a Transient Stability study and a Short Circuit study for the affected IID and SDG&E systems, the SIS and/or FS to be performed by IID must include such analyses for the affected IID and SDG&E systems.

18. For any reasonably foreseeable new or modified downstream facilities, environmental impact information and identification of mitigation measures are required.
19. Review, Analysis and Conclusions by the Cal-ISO on the SCE, Western and IID SISs and/or Facility studies.
20. Final layout plans with description of facilities and one line diagrams for the BEP II Switchyard, Buck Blvd. Substation, the new 500 kV line and Devers substation (Coachella or Dillon Road Substation be included if necessary) with proposed equipment and their ratings in concurrence with the respective transmission owner.
21. A copy of the "request to interconnect BEP II" by Caithness to Western, and the associated study plan and schedules for completing the SIS and/or FS.
22. A copy of the "request to terminate the proposed new 500 kV line" by IID or others to SCE and Western, and the associated study plan and schedules for completing the SIS and/or FS.
23. Evidence that the CEQA/NEPA reviews have made adequate progress to ensure that construction of the 500 kV line and its schedule have been finalized by IID, that the 500 kV line has been approved for termination by SCE and Western, and that a schedule for building any other new or modified downstream facilities necessary to comply with reliability criteria have been finalized.

Discussion

Approximately 8+ interconnection scenarios have been suggested by the applicant since filing the AFC. At the April 10, 2003 conference call, the applicant selected the TSE Figure 2 interconnection configuration for permitting purposes. Staff's analysis thus far analyzes only the TSE Figure 2 configuration and the above list of outstanding data pertains to that configuration. Staff has recently been informed by the Cal-ISO and

SCE that three additional Interconnection configurations (scenarios) have been requested by the applicant for study by the Cal-ISO, SCE and/or Western and IID. Until the applicant completes their feasibility study stage of the project definition and settles on a project definition, staff cannot analyze the "whole of the action" e.g. the "project". The applicant must select one interconnection configuration, provide an adequate SIS/FS performed by the Transmission Provider(s) for one and only one interconnection configuration and include all relevant information per the above. The selected interconnection configuration must be one for which the applicant seeks a license of, and defines and describes their final project.

Staff has also concluded that the TSE Figure 2 interconnection configuration does not conform with LORS and the absence of a project definition and identification of transmission construction timelines indicates the BEPII is infeasible because it will not be able to deliver its power to the load.

WATER RESOURCES

Outstanding Data

24. Discharge of wastewater from the BEP II facility to the proposed evaporation pond could result in potentially significant impacts to soil and groundwater quality as a result of leaks or overflows. Corrected evaporation pond calculations are needed, and should also be submitted to the Regional Water Quality Control Board (RWQCB).
25. Draft waste discharge requirements (WDRs) for the evaporation ponds are needed at least 60 days prior to the release of the FSA.
26. Quantify the amount of auxiliary firing and reflect the associated water use in revised heat and water balances.
27. Various submittals have been in conflict regarding the type of inlet cooling. Therefore, the heat and water balances should be revised to reflect the type of inlet cooling that will be used at the plant.
28. Construction and operations at the BEP II site could result in increased stormwater runoff volumes and peak flowrates leaving the BEP II site resulting in potentially significant impacts. Revised design calculations for the stormwater retention basin are needed that demonstrate that the proposed retention basin can contain the runoff produced by a 100-year event and would meet the City of Blythe's freeboard requirements.
29. A revised retention basin design that includes an emergency spillway or outlet structure to safely route potential overflows away from the containment berm are needed.
30. Because the BEP II project as proposed by Caithness would cause significant impacts to the water supply and its users, would not conform to applicable LORS and State policy, and there is a feasible alternative to the use of Colorado River groundwater; staff recommends the project be amended to use the Dry Cooling alternative developed in the Water Supply and Cooling Options Study (Appendix

A), or equivalent. The Applicant should submit an amended AFC including a description of project design and operational plan for the BEP II.

31. Staff needs the full report on the 2002 groundwater quality sampling of BEP I production wells including the results that did not exceed the primary or secondary drinking water standards. The Blythe Lemon Ranch gasoline leak may require further evaluation for potential significant impacts related to entrainment and migration of any contaminate plume.
32. Reasonably quantitative conservation of water by the Water Conservation Offset Program (WCOP) cannot be determined because there is no comprehensive plan available. Wind and water born soil erosion related potentially significant impacts to fallowed lands could occur due to inadequate mitigation measures not consistent with NRCS recommended guidelines. A complete WCOP is needed that includes detailed procedures for implementation, management, monitoring, reporting, and verification of its effectiveness for both quantitative conservation of 3300 AFY of Colorado River groundwater and mitigation of erosion related potentially significant impacts to fallowed lands. The complete draft WCOP should be made available for review and comment by agencies to include the USBR, CRB, PVID, and NRCS at least 60 days prior to the date scheduled for publication of the FSA.
33. Responses to unanswered Staff Data Requests.

Discussion

As currently proposed, BEP II would cause significant water supply related direct and cumulative impacts, and would not conform to applicable LORS. Additional information noted above is needed to reach final conclusions on those aspects of the project.

The Energy Commission has recently formally adopted policy related to water use by power plants in the State in the 2003 Integrated Energy Policy Report (IEPR) that recognizes the importance of the need to conserve the State's water supply. In support of this policy, an alternative to the proposed project has been recommended by staff.

The information noted above is needed to adequately evaluate the proposed project design with the WCOP. This additional data is not necessary if the preferred Dry Cooling alternative is implemented.

WORKER SAFETY AND FIRE PROTECTION

Outstanding Data

34. Prior to the issuance of the FSA, the applicant and the City of Blythe Fire Department must provide staff with adequate relevant and specific information for staff to conduct a thorough analysis and make a determination regarding impacts to local services.

Discussion

In December 2002, the City of Blythe indicated it was preparing a needs assessment for BEP II (Blythe 2002). This needs assessment was to have been provided to staff in

May 2003 as per statements made by the applicant. However, on July 27, 2003, staff received notice from the applicant that the needs assessment would not be completed and submitted to the CEC until after certification.

Without a Fire Services Needs Assessment for BEP II and without specific information from the fire departments on their expected needs, staff cannot make a determination at this time whether impacts on the fire and emergency services would be significant.

ENVIRONMENTAL JUSTICE

Outstanding Data

35. In order for staff to complete the environmental justice analysis, the applicant will need to provide full details on the proposed fallowing of croplands associated with the WCOP including the exact location of acreage being fallowed (such as township and range) the number of acres and type of crop to be fallowed, and number of workers associated with the crop and acreage.

Discussion

The previously approved BEP I is the subject of an environmental justice complaint with the U. S. Department of Energy (DOE), and BEP II would be the second power plant constructed within two miles of a minority and low-income population. The use of the Colorado River groundwater and the WCOP may impact the region's farm labor, farm services, and farm supply sector thereby creating environmental justice implications.

CONCLUSION AND RECOMMENDATION

There is insufficient information for staff to conclude the project would conform with all applicable LORS, and whether the project's potential impacts on public health and safety, the environment, and transmission system will be adequately mitigated. Substantial additional information for Air Quality, Biology, Cultural Resources, Land Use, Socioeconomics, Traffic and Transportation, Transmission System Engineering (TSE), Worker Safety and Fire Protection, and Water and Soil Resources is necessary to complete the FSA. This information has been requested in previous data requests and in conference calls; however, Caithness has not provided a schedule of when this data will be provided for review.

Since filing the AFC, Caithness has discussed and analyzed many project interconnection and termination configurations with the Energy Commission, IID, Western, SCE, and the Cal-ISO. To better understand the project's interconnection and termination configurations and its feasibility, staff has requested a copy of Caithness' interconnection study requests and study plans submitted to Western, SCE and IID, and the completed System Impact and Facilities Studies from SCE, Western, and IID for the final selected interconnection configuration only. Caithness has not provided a schedule when this information will be provided and when the studies will be completed.

Once the above noted System Impact and Facilities Studies are completed and Caithness selects measures to mitigate system impacts that are acceptable to SCE, IID,

Western, and the Cal-ISO, Caithness should submit an AFC amendment describing these project changes and provide the necessary detailed analysis for all the relevant technical disciplines impacted by these changes. The selected interconnection and termination configuration should be the one for which Caithness is seeking a permit from the Energy Commission and it must be consistent with all other filings Caithness makes with SCE, IID, Western, the Cal-ISO, or other transmission providers.

Staff concludes that Caithness' proposed use of groundwater to cool the plant would cause a significant direct impact to the Palo Verde Irrigation District water supply and its users, and contribute to a significant impact to the State's Colorado River water supply and its users. In light of these significant impacts and the requirement that the state reduce its use of Colorado River water over the coming years, staff recommends the project be cooled without the use of groundwater but through dry-cooling technology that has been successfully employed by the Sutter Project in the Sacramento Valley, and will be used for the 590-megawatt (MW) Okay Mesa project in San Diego County, and the 548-megawatt Reliant Energy Bighorn facility south of Las Vegas. There are currently five dry-cooling power projects proposed in Nevada. Staff recommends that the applicant provide an amendment to the AFC changing the project to dry-cooling. The analysis of this project change would be included in the FSA.

Considering the number of outstanding issues, staff recommends that the PSA be circulated for review and comment, and that the Committee hold a Status Conference.

- This will allow the applicant to identify when the outstanding information will be provided and the Committee to determine the next set of milestones in the project schedule. Staff will be prepared at the Status Conference to offer its recommendations on the project schedule.

**BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT
COMMISSION OF THE STATE OF CALIFORNIA**

In the Matter of:

**Application for Certification for the
BLYTHE ENERGY PROJECT- PHASE II**

Docket No. 02-AFC-1

**PROOF OF SERVICE
(Revised on 11/24/03)**

I, Evelyn M Johnson, declare that on December 5, 2003, I deposited copies of the attached **RE: Blythe II Status Report for December 2003 (02-AFC-1)**, in the United States mail at *Sacramento, CA* with first class postage thereon fully prepaid and addressed to the following:

DOCKET UNIT

***Send the original signed document plus the
required 12 copies to the address below:***

CALIFORNIA ENERGY COMMISSION
DOCKET UNIT, MS-4
Attn: Docket No. 02-AFC-1
1516 Ninth Street
Sacramento, CA 95814-5512

* * * *

In addition to the documents sent to the
Commission Docket Unit, also send individual
copies of any documents to:

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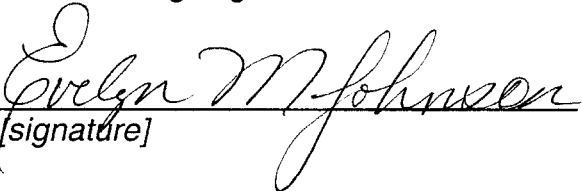
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I declare under penalty of perjury that the foregoing is true and correct


[signature]

* * * *

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DOCKET
02-AFC-1

Date: DEC 05 2003

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